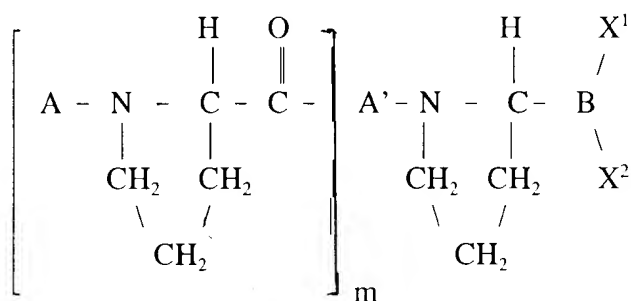


between A' and N are peptide bonds; and each X¹ and X² is, independently, a hydroxyl group or a group capable of being hydrolyzed to a hydroxyl group at physiological pH. Please add the following new claims:

21. The inhibitor of claim 13, wherein m is 0.

22. The inhibitor of claim 13, wherein m is an integer between 1 and 10, inclusive.

23. A substantially pure preparation of an inhibitor of DP-IV, said inhibitor having the structure:

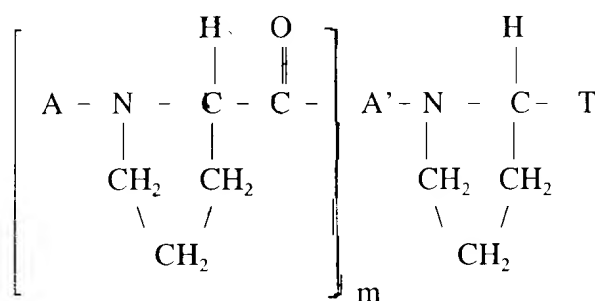


wherein m is an integer between 0 and 10, inclusive; A and A' are L-amino acid residues such that the A in each repeating bracketed unit can be a different amino acid residue; the C bonded to B is in the L-configuration; the bonds between A and N, A' and C, and between A' and N are peptide bonds; and each X¹ and X² is, independently, a hydroxyl group or a group capable of being hydrolyzed to a hydroxyl group at physiological pH.

24. The preparation of claim 23, wherein said inhibitor is 99% pure.

25. The preparation of claim 23, wherein A and A' of said inhibitor are in L-configuration.

26. The preparation of claim 23, wherein m is 0.
27. The preparation of claim 23, wherein m is an integer between 1 and 10.
28. The preparation of claim 23, wherein X^1 and X^2 are hydroxyl groups.
29. The preparation of claim 23, wherein said inhibitor is L-Ala-L-boroPro.
30. The preparation of claim 23, wherein said inhibitor is L-Pro-L-boroPro.
31. An inhibitor of DP-IV, having the structure:

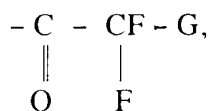


wherein m is an integer between 0 and 10, inclusive; A and A' are L-amino acid residues such that the A in each repeating bracketed unit can be a different amino acid residue; the C bonded to B is in the L-configuration; the bonds between A and N, A' and C, and between A' and N are peptide bonds; each X^1 and X^2 is, independently, a hydroxyl group or a group capable of being hydrolyzed to a hydroxyl group at physiological pH; and wherein T is selected from the group consisting of the formula:

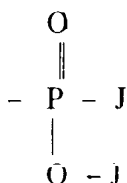
D2



solution at physiological pH; a group of the formula:



where G is either H, F or an alkyl group containing 1 to 20 carbon atoms and optional heteroatoms which can be N, S, or O; and a phosphonate group of the formula:



where each J, independently, is O-alkyl, N-alkyl, or alkyl, each said O-alkyl, N-alkyl or alkyl comprising 1 - 20 carbon atoms and, optionally, heteroatoms which can be N, S, or O; said T being able to form a complex with the catalytic site of a dipeptidyl-aminopeptidase type IV (DP-IV) enzyme.

32. The inhibitor of claim 31, wherein T is a phosphonate group.

33. The inhibitor of claim 31, wherein T is a trifluoroalkyl ketone group.

34. A method for inhibiting a DP-IV comprising,
contacting said DP-IV with an inhibitor of claim 31 under conditions to permit binding of said inhibitor to said DP-IV.

REMARKS

Claim 13 is amended to reinstate the claim language prior to the Amendment filed on February 26, 1997 in the parent case, USSN 08/459,654, by Applicants' prior